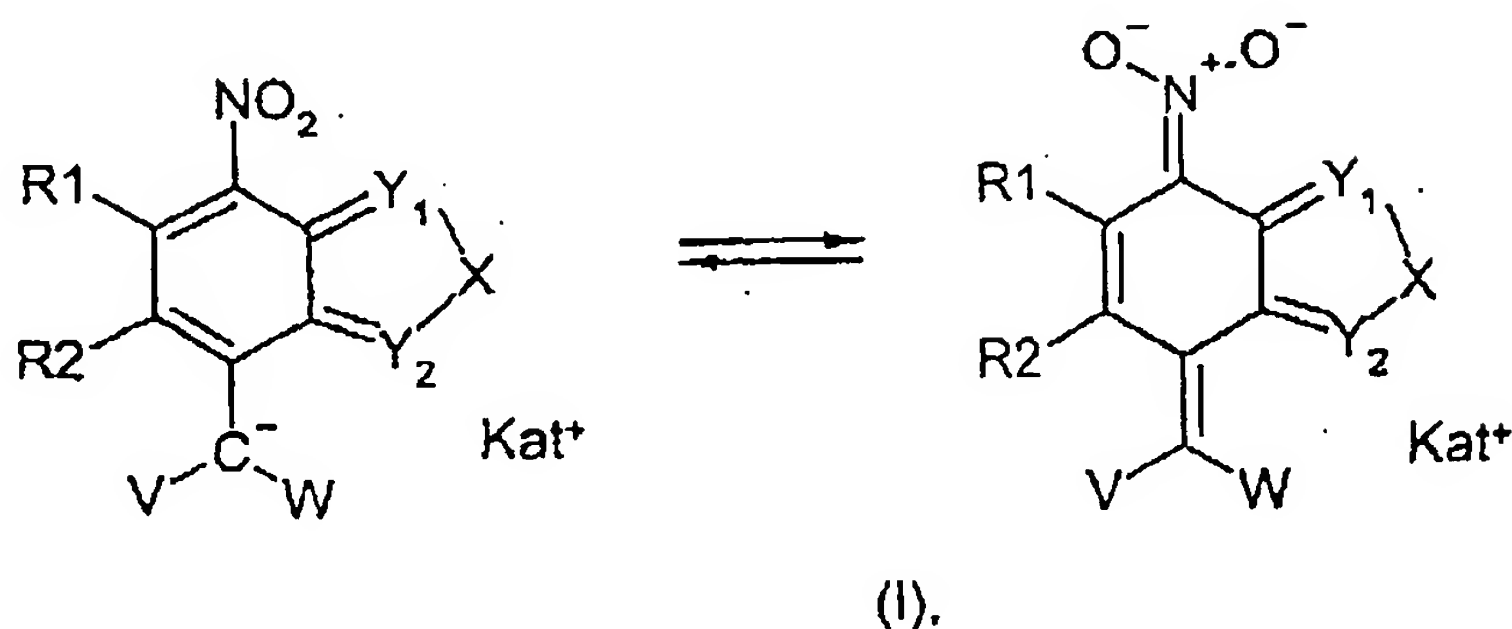


Claims

1. 4-Nitro-2,1,3-benzoxadiazole derivatives and 4-nitro-2,1,3-benzthiadiazole derivatives of the general Formula



in which

X is oxygen or sulfur

Y1 and Y2 may be the same or different and, independently of one another, represent a nitrogen atom or a nitrogen monoxide group (NO),

R1 and R2 may be the same or different and, independently of one another, may be hydrogen, a halogen atom, a (C₁-C₄) alkyl group, (C₁-C₄) alkyl group substituted with a halogen atom, a (C₁-C₄) alkoxy group, a nitro group or an NR^aR^b group, the R^a and R^b being the same or different and, independently of one another, representing hydrogen, a (C₁-C₄) alkyl group, an optionally substituted, aromatic carbocyclic group or a (C₁-C₄) alkane carbonyl group, or R^a and R^b, together with the nitrogen atom, form a heterocyclic (C₃-C₆) group, V represents hydrogen, an aliphatic group, an aromatic isocyclic group, an aromatic heterocyclic group, a cyano group or a carbonyl function (CO)-R³, wherein R³ represents hydrogen, a hydroxy group, a (C₁-C₄) alkoxy group, an amino group, a (C₁-C₄) alkylamino group, a (C₁-C₆) alkyl group or an aryl group,

W represents a cyano group or a carbonyl function (CO)-R⁴, R⁴ representing hydrogen, a hydroxy group, a (C₁-C₄) alkoxy group, an amino group, a (C₁-C₄)

alkylamino group, a (C₁-C₆) alkyl group or an aryl group; alternatively, V and W can also jointly form an aliphatic or aromatic isocyclic or heterocyclic ring system; and Kat⁺ represents an alkali cation, an alkaline earth cation, a quaternary ammonium group, a quaternary phosphonium group or a sulfonium group.

2. The compounds of claim 1, wherein

X is oxygen or sulfur,

Y1 and Y2 may be the same or different and, independently of one another, represent nitrogen or a nitrogen monoxide group (NO),

R1 and R2 may be the same or different and, independently of one another, represent hydrogen, a halogen atom, a (C₁-C₄) alkyl group or a nitro group,

V is hydrogen, an aliphatic group, an aromatic isocyclic group, an aromatic heterocyclic group, a cyano group or a carbonyl function (CO)-R₃, R₃ being hydrogen, a hydroxy group, a (C₁-C₄) alkoxy group, an amino group, a (C₁-C₄) alkylamino group, a (C₁-C₆) alkyl group or an aryl group,

W represents a cyano group or a carbonyl function (CO)-R₄, R₄ being hydrogen, a hydroxy group, a (C₁-C₄) alkoxy group, an amino group, a (C₁-C₄) alkylamino group, a (C₁-C₆) alkyl group or an aryl group; alternatively, V and W may also jointly form an aliphatic or aromatic isocyclic or heterocyclic ring system and

Kat⁺ corresponds to an alkali cation, an alkaline earth cation, a quaternary ammonium group, a quaternary phosphonium group or a sulfonium group.

3. The compounds of claims 1 or 2, wherein 7-nitro-2,1,3-benzoxadiazole derivative of Formula (I) is selected from the sodium salt of 4-(dicyanomethyl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(1-cyano-2-ethoxy-2-oxoethyl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(dicyanomethyl)-7-nitro-2,1,3-benzoxadiazole-N-oxide, the sodium salt of 4-(dihydro-2,4,6(1H,5H)-pyrimidine-trione-5-yl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(1-cyano-3,3-dimethyl-2-oxobutyl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(bis(methoxycarbonyl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt

of 4-(4,5-dihydro-3-methyl-1-phenyl-1H-pyrazole-5-one-4-yl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(cyano-(4-nitrophenyl)-methyl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-((aminocarbonyl)-cyano-methyl)-7-nitro-2,1,3-benzoxadiazole-1-oxide, the sodium salt of 4-(1-cyano-2-ethoxy-2-oxoethyl)-7-nitro-2,1,3-benzoxadiazole-1-oxide, the sodium salt of 4-(1,3-cyclohexane-dione-2-yl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(carboxy-cyanomethyl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(2-ethoxy-1-nitro-2-oxoethyl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-((aminocarbonyl)cyanomethyl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(dihydro-2-thioxo-4,6(1H,5H)-pyrimidine-dione-5-yl)-7-nitro-2,1,3-benzoxadiazole-1-oxide, the sodium salt of 4-(1,3-dioxo-indan-2-yl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(2-oxo-2,3-dihydro-1H-indole-3-yl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(4-oxo-2-thioxo-thiazolidine-5-yl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(dihydro-6-thioxo-2,4-(1H,5H)-pyrimidine-dione-3-yl)-7-nitro-2,1,3-benzoxadiazole, the sodium salt of 4-(1-cyano-2-oxo-2-phenylethyl)-2,1,3-benzoxadiazole and the sodium salt of 4-(cyano-(2-nitrophenyl)-methyl)-7-nitro-2,1,3-benzoxadiazole.

4. The compound of claims 1 or 2, wherein the 7-nitro-2,1,3-benzthiadiazole derivative of Formula (I) is selected from the sodium salt of 4-(dicyanomethyl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(1-cyano-2-ethoxy-2-oxoethyl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(cyano-(4-nitrophenyl)-methyl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(dicyanomethyl)-7-nitro-2,1,3-benzthiadiazole-N-oxide, the sodium salt of 4-(dihydro-2,4,6(1H,5H)-pyrimidine-trione-5-yl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(1-cyano-3,3-dimethyl-2-oxobutyl)-7-nitro-2,1,3-benzthiadiazole, 4-(bis(methoxycarbonyl)-7-nitro-2,1,3-benzthiadiazole, 4-(4,5-dihydro-3-methyl-1-phenyl-1H-pyrazole-5-one-4-yl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(1,3-cyclohexane-dione-2-yl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(carboxy-cyanomethyl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(2-ethoxy-1-nitro-2-oxoethyl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-

((aminocarbonyl)cyanomethyl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(dihydro-2-thioxo-4,6(1H,5H)-pyrimidine-dione-5-yl)-7-nitro-2,1,3-benzthiadiazole-1-oxide, the sodium salt of 4-(1,3-dioxo-indan-2-yl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(2-oxo-2,3-dihydro-1H-indole-3-yl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(4-oxo-2-thioxo-thiazolidine-5-yl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(dihydro-6-thioxo-2,4-(1H,5H)-pyrimidine-dione-3-yl)-7-nitro-2,1,3-benzthiadiazole, the sodium salt of 4-(1-cyano-2-oxo-2-phenylethyl)-2,1,3-benzthiadiazole and the sodium salt of 4-(cyano-(2-nitrophenyl)-methyl)-7-nitro-2,1,3-benzthiadiazole.

5. An agent for dyeing keratin fibers, wherein the agent contains at least one 4-nitro-2,1,3-benzoxadiazole derivative and/or 4-nitro-2,1,3-benzthiadiazole derivative of the general Formula (I) of one of the claims 1 to 4.

6. The agent of claim 5, wherein the agent contains the compound of Formula (I) in an amount of 0.0 to 10% by weight.

7. The agent of claims 5 or 6, wherein the agent, in addition to the compound of Formula (I), contains at least one further substantive dye from the group of anionic, cationic, nonionic or amphoteric dyes, nitro dyes, azo dyes, anthraquinone and dispersion dyes.

8. The agent of one of the claims 5 to 7, wherein the agent consists of at least one polymer, which is customarily used for cosmetic agents, from the group comprising natural and synthetic polymers and modified polymers of natural origin and is present in the form of shade fastener or color fastener.

9. The agent of one of the claims 5 to 8, wherein the agent is a hair-dyeing agent.

10. The use of 7-nitro-2,1,3-benzoxadiazole derivatives and/or 7-nitro-2,1,3-benzthiadiazole derivatives of the general Formula (I) of one of the claims 1 to 4 as dye in dyeing agents for keratin fibers.